

CASE STUDY

SYRIAN ARAB REP. 2019–2020 / SYRIAN CRISIS

KEYWORDS: Durable solutions, Housing construction, Settlement planning

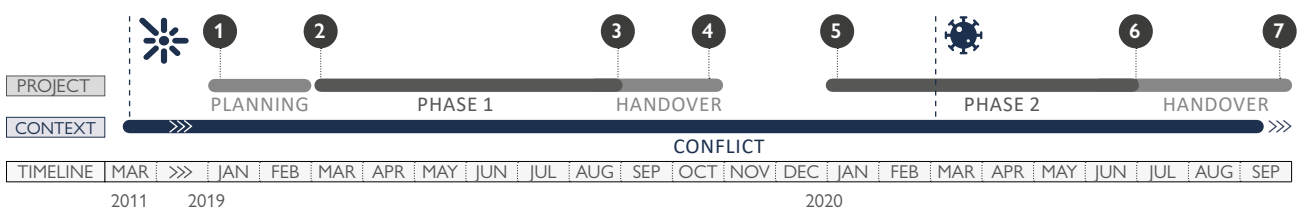
CRISIS	Syrian crisis, 2011 onwards
PEOPLE AFFECTED	4.3 million people affected by conflict in Northwest Syria of whom 2.8 million are IDPs*
PEOPLE DISPLACED	2.7 million IDPs living in Northwest Syria
PROJECT LOCATION	Al-Bab, Aleppo Governorate
PEOPLE SUPPORTED BY THE PROJECT	204 HHs (1,224 individuals) directly supported
PROJECT OUTPUTS	<p>204 apartments built</p> <p>893 job opportunities created (849 construction workers + 44 suppliers)</p> <p>Drinking water and sewage networks installed</p> <p>1,410m of roads constructed</p> <p>6 shops constructed</p>
SHELTER SIZE	46.5m²
SHELTER DENSITY	7.75m² per person
DIRECT COST	<p>USD 3,205 per HH (for buildings, not including infrastructure costs)</p> <p>USD 3,500 per HH (including infrastructure costs)</p>
PROJECT COST	USD 5,022 per HH



PROJECT SUMMARY

To support IDPs facing protracted displacement due to ongoing conflict in the Syrian Arab Republic (Syria), the project built 204 new-build permanent homes as part of a new housing development to be occupied by IDP households and managed by the local council. The organization identified local representatives and agreed the scope of the project with the local authority, the community, and other stakeholders. The project focused on a permanent shelter solution, including durable structures and infrastructure such as water and sewage networks and roads. The construction activities also created livelihood opportunities for 893 host community members and IDPs.

* Source: [North-West Syria: Shelter & NFI Emergency Overview \(Dec 2020\)](#)



- Mar 2011:** Syria Crisis began.
- 1 01 Jan 2019:** Signed agreement with Al-Bab Governor and The Disaster and Emergency Management Presidency (AFAD).
- 2 01 Mar 2019:** Phase 1 construction started.
- 3 31 Aug 2019:** Phase 1 construction completed (112 homes).
- 4 31 Oct 2019:** Handover of 112 homes completed.
- 5 01 Jan 2020:** Phase 2 construction started.
- 11 Mar 2020:** WHO declared the novel COVID-19 outbreak a global pandemic.
- 6 31 Jun 2020:** Phase 2 construction completed (92 homes).
- 7 31 Sep 2020:** Handover of 92 homes completed.



The project supported IDP shelter needs through constructing permanent new-build housing.

CONTEXT

For more background information on the crisis and response in the Northwest of the Syrian Arab Republic (Syria) [see A.22](#).

The project targeted an area of northern Aleppo (Al-Bab district). Prior to the crisis, the population lived in mainly urban and peri-urban areas. These areas had services such as electricity and running water but had only limited official recognition and registration. Al-Bab has a cold semi-arid climate with hot dry summers and cool wet and occasionally snowy winters. People mainly worked in agriculture and some small industry workshops. The common building style in Al-Bab, especially in urban and peri-urban areas is building with cement blocks with reinforced concrete.

The area is considered relatively safe in comparison with other areas. In north Aleppo between Al-Bab to Jرابلس, there are 55 camps; most are informal and self-settled and many have been occupied for many years. Most IDPs in camps in Northern Syria suffer from poor living conditions, where many tents became worn-out. The roads in camps are rarely paved and are in poor condition, causing floods, especially in the winter season. Additionally, camp infrastructure is lacking, and many services are unavailable, including adequate electricity and WASH services. Children also encounter many difficulties in accessing education in camps.

NATIONAL SHELTER STRATEGY/RESPONSE

In Northern Syria, humanitarian organizations primarily follow the Shelter Cluster (Turkey Hub) strategy. The Shelter Cluster's two strategic objectives are:

1: Provide life-saving and life-sustaining shelter and NFI support.

2: Reinforce an enabling protection environment and communities' cohesion by improving housing and related community/public infrastructure.

This project linked to the second sector objective to increase adequate housing stock available to targeted households and communities through providing sustainable

and safe housing and related community/public infrastructure and facilities to IDPs and host community.

The project also linked to the Early Recovery & Livelihoods (ERL) Cluster objective of strengthening access to livelihoods by creating income-generating opportunities and by improving access to production and market infrastructure to support local economic recovery through providing short-term work opportunities in the project.

PROJECT APPROACH

The project approach was to provide dignified, secure housing and to provide livelihood opportunities for targeted IDPs and host community family members during the different stages of project implementation. The project drew on the skills of IDP and host community households throughout different phases of the project, which helped to revive the economy within the project area.

The main goal of the project was to alleviate the suffering of displaced families by providing safe and adequate housing. The intended project outcomes were to:

- Improve the community's resilience, coping mechanisms, and local participation by providing adequate housing to 204 displaced families;
- Improve the living conditions of displaced persons by supporting development of technical skills, practical experience, and career opportunities that can be used to alleviate poverty and restore livelihoods; and
- Support the most vulnerable groups in society, including orphans, widows, and the elderly, as the primary recipients of shelter support.

Due to the protracted nature of the crisis, IDPs have been living in precarious situations for a long time. The project location in northern Aleppo is relatively safe and secure with no bombardments or clashes for more than 3 years. As such, the organization decided to develop new-build permanent housing as housing security and more dignified shelter were considered by IDPs to be the first steps to recovery.



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PROJECT LOCATION AND LAND IDENTIFICATION

The organization began selection of the location for the project based on a series of criteria including the ratio of IDPs to non-IDPs in each sub-district, the degree of severity of each affected sub-district, the security situation and access reports, and the market assessment and availability of raw materials in the targeted location.

The organization prioritized a list of potential locations and selected the community of Sussian (a small village within the district of Al-Bab city located 10km north of Al-Bab) because raw materials and persons with building experience were available in the region, the region is safe and stable and had a population of 900,000 people, half of whom were IDPs, and the area was hosting more than 55 camps and self-settled sites.

Identification of appropriate land for the development was done using a set of criteria to evaluate different options, including, for example, factors such as ownership of land (that it was publicly owned), water availability, links to road and electricity networks, and access to infrastructure such as schools, health centers, and access to construction materials and labor.

Once the site was identified, the organization conducted Housing, Land and Property Verification and determined the land was a public property under control of the local council of Al-Bab, who provided the ownership documents, which the organization verified by consulting a community representative, local elders, the mosque's Imam, and the Mukhtar of Sussian Village.

COORDINATION AND ENGAGEMENT

A small shelter committee was established, and included local council representatives of Al-Bab and Sussian, a member from the Turkish authority in Al-Bab, a member from The Disaster and Emergency Management Presidency (AFAD), and members from host community dignitaries in Sussian. IDP households who would move into the new housing had not yet been selected, so there was no resident representative in the committee. The organization agreed on the scope of the project with the local authority and the community. The organization also conducted community outreach activities through holding meetings with the Turkish authority and local councils, shelter committee meetings, and focus group discussions. The local authorities and host community dignitaries were consulted on the project's pros and cons for their communities.

HOUSEHOLD SELECTION

To select the households to move into the new housing, the organization created a preliminary list of households by creating registration opportunities in local councils; conducting house-to-house registration visits; and considering households suggested by the local authorities.

The nominated list then passed through two filters, the first being the eligibility criteria. The eligibility criteria included, but was not limited to, that the household was displaced and without adequate shelter; unable to get back to their place of origin within Syria, and were not receiving another form of housing assistance such as Cash-for-Shelter or rental assistance. Households who met all the eligibility criteria were then prioritized according to a list of vulnerability criteria. The selection was done in collaboration between the local council and the organization.



The land for the new development was located 15km from the city of Al-Bab. In addition to housing, six shops were built on the site. Space was also allotted for social infrastructure including a school, however at the time of project implementation, funding to build the school had not yet been secured.

SITE PLANNING AND DEVELOPMENT

After the household selection, the organization started technical design and site planning. The total project design included 51 2-story blocks, consisting of 204 homes, each with two bedrooms, one sitting room, a kitchen, and bathroom. The organization also installed/rehabilitated the drinking water networks and sewage system, three septic tanks, asphalt roads and sidewalks. The project included installing electricity infrastructure (connections, cables, switches, and lamps) in order for the houses to receive electric power from any supplier.

In addition to space for housing, space on the site was allocated for social infrastructure including a school, however at the time of project implementation, funding to build the school had not yet been secured. A mosque was built on the site, funded by a private donor. Small trees were planted between the blocks.

The site plan included six shops of 16m² each. The shops are managed and rented by the local council, with the shop tenants being either residents from within the development itself or from the host community. The revenue from shop rental payments is used to contribute to running costs in the new development, such as garbage disposal or infrastructure maintenance.



During the planning phase of the project, displaced households were consulted on the layout of the apartments.



Feedback on the apartment design included that it was important to have a separation of spaces, both for privacy and to allow for different functions within the home.

HOUSING DESIGN

In the planning phase, displaced households were consulted on the size and internal divisions of the apartments. The apartment plan was modified as per their feedback and considering cultural customs, such as having two rooms to separate women and men or give privacy for elderly household members: separated kitchen, a small sitting room to host guests, and a private and detached bathroom. A small front space was also added between buildings to allow for social interactions between neighbors.

The reinforced concrete building design was in line with standard Syrian specifications. The technical standards for the housing design were developed to meet the following conditions: compatibility with Sphere Standards, secure and safe with protection from humidity, thermal comfort, ventilation, privacy, rain proofing, including a food preparation area, water supply, toilet and sanitation facilities, fittings for stoves and water tanks, sewage system and sufficient space to sleep and conduct daily activities.

CONSTRUCTION PROCESS

The construction works were carried out by contractors who competed using a tendering process and committed to using workers from the IDPs and host communities. The housing construction was split into two phases.

In terms of quality assurance throughout the project, the project relied on the Syrian building standard issued from the Syrian engineer's syndicate and the Syrian union contract system. The field staff issued weekly and monthly reports and conducted all inspection and tests of the raw materials and the building elements. Two qualified engineers oversaw the daily quality control and quality assurance to ensure it matched the project specifications.

New construction workers undertook an inception training within skilled groups, and an on-the-job training method was used with workers learning by doing under the oversight of the workgroup's foreman. The project implementation period provided short and medium-term jobs to many professional and skilled workers who were out of work due to the crisis. Some of the construction workers were from displaced households who would become the residents of the new housing.



Construction was mainly carried out by contractors, with the organization overseeing quality control and quality assurance.

HANDOVER

The organization handed over the completed development to the local council of Al-Bab and signed an agreement with them. There were a number of important provisions within the handover agreement, including that the ownership of the development is public property administered by the Local Council of The City of Al-Bab, the homes were to be occupied by the households from the agreed upon list, the housing should be free of charge to residents with no rent to be collected, and contracts with residents would be signed annually with the status of the resident household being re-assessed annually by a committee formed by the Council. The approach to management of the housing adopted some social housing principles.

The local council will manage the solid waste removal and septic tanks desludging and any needed maintenance. While the housing is free of charge in terms of rent, this does not include utility expenses. The residents along with the local council established a committee of resident representatives to address this by collecting small fees from the residents to cover these costs. After completion of the development some other NGOs have also started providing some utility services.

MAIN CHALLENGES

Initial delays. In the first phase the project experienced initial delays due to a change in the organization's financial policies, and delays in the signing of the funding agreement with the donor. The start of the project then coincided with the beginning of Ramadan and with a severe heatwave that affected the pace of construction works. To address

this the project start and end dates were adjusted, the workplan was compressed, and the number of construction workers was increased to finish the project as quickly as possible

Heat wave. The challenges created by the heatwave were overcome by taking precautions to reduce working hours and to work in the evenings and early morning to avoid harm to both workers and cement works, avoiding work being carried out during the hottest times of the day. Ice cubes were also used in pouring and mixing concrete.

COVID-19 pandemic. The second phase of construction works was impacted by the COVID-19 pandemic which resulted in new work procedures being brought in such as ensuring social distancing, using personal protective equipment, and ensuring meetings with stakeholders were managed in a way as to avoid crowds forming.

OUTCOMES AND WIDER IMPACTS

The project contributed to providing permanent housing for displaced people, which will contribute to their stability and improve living conditions. The project also generated short and medium-term livelihood and business opportunities for engineering staff, technicians, workers and suppliers during the project implementation period. The newly acquired skills for the new construction workers may help them in the future to find work on other building projects in the area.

This project drew the attention of other NGOs to the importance of permanent shelter options. In 2020 many NGOs started similar projects in the north of Aleppo.



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Small trees were planted between the housing blocks.

STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

- ✓ **Durability of shelter support.** The project provided permanent housing that is durable, will have a long lifespan and provides housing security to residents.
- ✓ **Livelihood opportunities.** The project enhanced skills and generated income opportunities for local host communities and for displaced people, contributing to social cohesion.
- ✓ **Availability of raw materials for construction in the project area.** This meant that materials such as sand and gravel could be procured locally, benefiting the local market.
- ✓ **The project enhanced social cohesion** between the host community and IDPs wherein the new project alleviated a part of the burden on the host community. Investing in permanent new infrastructure and housing that will be managed in a similar way to social housing going forward also provides an asset for the local council.

WEAKNESSES

- × **The distance from Al-Bab City (15km)** caused difficulty for residents to access the market and other services. While this was a consideration in the site selection criteria, this site was the best available option. While the site plan created spaces for services, the development still lacks some key facilities such as a school and a pharmacy.
- × **Heating costs.** Cement homes need heating in the winter, and the project did not include support for an operational period.
- × **No energy source provided.** Electricity infrastructure was built into the homes, but there was no electricity provider to link the grid up to. The project could have included the installation of a solar energy system to generate electricity for lighting homes and/or a solar water heating system.
- × **The absence of balconies in the house design.** It was noted that there is a big problem in spreading the laundry on the rooftops.
- × **Accessibility.** The lack of ramps for entering the ground floor entrance caused hardship for people with mobility challenges and those using wheelchairs when entering homes.



Lessons learned note that specific play spaces for children could have been designed in to the settlement plan.



Accessibility was noted as a weakness of the project, with ground floor entrances creating a challenge for people with reduced mobility.

LESSONS LEARNED

- **The location of new housing in relation to existing settlements and services is key.** In this case, selection of a site closer to Al-Bab would have ensured better access to markets and services. Given the distance of the new development from the city, transportation links needed to be better considered, and a wider range of primary service buildings and social infrastructure needed to be included, such as school, mosque, shops, administration office, a small clinic, and play areas for children. Spaces on the site plan were left with the potential some of these services will come later.
- **More in depth engagement with residents on the housing design could have identified design issues sooner,** such as the lack of balconies and access constraints.
- **Operation of utilities and service costs need full consideration.** The project missed the opportunity of supporting the development with solar panel system and solar heating system to provide the electricity and hot water for the houses. An additional learning is that supporting operational costs for a period of six months after the end of construction work would help with the transition and handover.
- **Launching microfinance and small projects** could secure income for the residents and ensure the development is more sustainable.